

Ronald D. Blum et al.  
Application No.: 09/994,860  
February 16, 2010

PATENT  
Attorney Docket No. 027001-000310US

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Ronald D. Blum

Application No.: 09/994,860

Filed: November 28, 2001

For: METHOD AND APPARATUS FOR  
REDUCING THE INTENSITY OF  
HURRICANES AT SEA BY DEEP-  
WATER UPWELLING

Confirmation No. 9812

Examiner: BOECKMANN, Jason J.

Technology Center/Art Unit: 3752

**PETITION UNDER 37 C.F.R. § 1.181(a)  
TO WITHDRAW FINALITY OF  
REJECTION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Commissioner:

Applicants respectfully Petition under 37 C.F.R. § 1.181(a) that the Office withdraw the purported finality of the Office Action mailed December 15, 2009. Applicants are in receipt of a Final Office Action mailed December 15, 2009 (“Office Action”) in this application. The Office Action is in response to Applicant’s September 3, 2009 Amendment and Information Disclosure Statement (“IDS”) with Request for Continued Examination (“RCE”). Thus, the Office Action is a first action final rejection after RCE. The Office Action does not address the substance of IDS and Applicant’s related remarks.

Applicant respectfully submits that the finality of the Office Action is premature and therefore requests withdrawal of that finality, pursuant to Section 706.07(d) of the Manual of Patent Examining Procedure (MPEP). Moreover, Applicant requests that the substance of the IDS and Applicant’s related remarks be properly addressed.

**Grounds For Petition**

As grounds for this Petition, Applicant states as follows:

1. A Final Office Action was mailed on July 24, 2008 rejecting all of the claims then pending in the present application under 35 U.S.C. §101 and 35 U.S.C. §112, first paragraph. No prior art rejections were asserted in the Final Rejection. The July 24, 2008 Final Rejection contained numerous statements expressing the Examiner's belief that the subject matter of the application "is a concept more in the realm of speculation and conjecture rather than the reduction of an idea to a practical application based on science and technology" and "one skilled in the art would not know how to make and use the claimed invention" because the "claimed invention is broad and sweeping in scope" and the "nature of the invention is a large-scale environment change." (Pages 2 and 4 of July 24, 2008 Office Action)
2. Applicant timely appealed the July 24, 2008 Final Rejection to the Board of Patent Appeals and Interferences on October 15, 2008.
3. While the application was pending on appeal, Applicant submitted an Amendment and Information Disclosure Statements (IDSs) on September 3, 2009 along with a Request for Continued Examination to reopen prosecution, and so that new references submitted in the IDSs could be considered by the Examiner. The September 3, 2009 IDS identified sixteen published applications and patents, along with thirteen publications including peer-reviewed articles, related to recent weather, and hurricane, modification techniques. The remarks of the September 3, 2009 Amendment specifically describe how the references submitted to the Patent Office in the IDS demonstrate, through multiple independent and respected scientific sources, that hurricane mitigation is possible, and how the claimed subject matter would be viewed as credible by those of skill in the art.

The remarks further rebut each of the premises asserted in the July 24, 2008 Final Rejection, with exemplary reference to the disclosed materials.

4. An Office Action issued on October 13, 2009 in response to Applicants' September 3, 2009 Amendment. The Office Action Summary was marked as both final and non-final. Subsequent discussions with the Examiner led to a revised Office Action being mailed on December 15, 2009 to correct this error. The Response to Arguments in the revised Office Action states, in its entirety:

Applicant's arguments filed 9/3/2009 have been fully considered but they are not persuasive.

Regarding the applicant's arguments concerning the 35 U.S.C. 101 and 112 1st paragraph rejections, the applicant uses various prior U.S. applications and U.S. patents to support and justify that the present invention meets the requirements of 35 U.S.C. 101 and 112 1st paragraph. However, the examiner is not at liberty to comment on the previous work of other examiners or the Patent office as a whole.

5. The December 15, 2009 Office Action clearly fails to adequately consider the arguments and information submitted by applicants in support of the RCE.

### **Remarks**

As made clear in the MPEP, submitting new information for consideration by the Office may require an RCE to force entry and consideration by the Examiner. *See, e.g.,* MPEP §609.02. In general, evidence will not be admitted after the filing of an appeal brief, thus, and RCE would be required to force consideration of new evidence at that stage. *See* MPEP §1206. Similarly, MPEP 706.07(b) specifies that it would not be proper to make final a first Office action in a continuing or substitute application or an RCE where that application contains material which was presented in the earlier application after final rejection or closing of prosecution but was denied entry because (A) new issues were raised that required further consideration and/or search, or (B) the

issue of new matter was raised. Read in context, these sections of the MPEP provide a framework where new information may be submitted for consideration with an RCE, and the Office will not make final a next Office Action after the submission of such information. The present application presents analogous facts, and the information submitted to the Office should be properly addressed in a non-final action.

In short, the finality of the rejection is improper on its face because the claims could not have been properly finally rejected on the grounds and art of record prior to the filing of the RCE,<sup>1</sup> because the art of record with respect to the 101 and 112 rejections has changed based on Applicant's IDS, which contained references germane to the credible utility of the claimed subject matter.

As mentioned above, Applicant submitted an IDS including sixteen published applications and patents, along with thirteen publications including peer-reviewed articles, related to recent weather, and hurricane, modification techniques in response to the Examiner's various assertions that the subject matter of the application lacks credible utility. Applicant filed an RCE to force entry and consideration of these references with respect to the pending 101 and 112 rejections, along with remarks that detail how the references demonstrate the credible utility of the claimed subject matter. The Office is required to consider this information on the basis of the properly filed IDS and RCE, and, moreover, Applicant is entitled to a reasonable opportunity to respond to any rebuttal by the Examiner. The Office Action fails to consider the evidence of record, and likewise fails to provide Applicant with a reasonable opportunity to respond based on the absence of any articulated consideration of the evidence and remarks.

First, the Office Action does not address the credibility of the sixteen published applications and patents, or the thirteen publications, at all. Thus, the Office Action has not apparently considered the information submitted by the Applicant, as required by the MPEP. This is particularly inappropriate in the context of the current 101 and 112 rejections, in which the Examiner broadly asserts, without evidentiary support, not only

---

<sup>1</sup> MPEP §706.07(b)

that the claimed subject matter lacks credible utility, but also that the sworn Declarations of three experts in support of the claims are insufficient.

Applicant has submitted relevant evidence including materials describing, for example, a wave-driven ocean upwelling system by Atmocean, Inc.™. The system is located in the open ocean, *i.e.*, hundreds of miles from land, and functions to pump deep ocean water to the ocean surface thereby cooling the upper ocean (Cite No. BF-BL). The upwelling system may be used to downsize hurricanes. Specifically, mathematical modeling outlining the placement of the upwelling arrays at a certain depth and location shows the lowering of the upper ocean temperature by a few degrees C, thereby reducing winds by up to 15% and reducing the overall damages by up to 40%. Additional materials were submitted describing methods for reducing hurricane intensity that have been published in peer-reviewed journals that provide clear scientific support related to the credible utility and operation of the claimed invention. For example, Rosenfield et al. provides evidence that particular methods that cool the environment surrounding a hurricane, *i.e.*, seeding-induced evaporative cooling, can reduce the overall strength of a hurricane. [page 3421, Cite No. BN] Additionally, LaRosa describes suppression of hurricane intensity, and even the possibility of preventing hurricanes, by reducing sea surface temperature. These references are relevant to the 101 and 112 rejections of record, and should be considered in a non-final rejection.

Second, without any articulated response to the references and remarks by Applicant, there is no reasonable opportunity for Applicant to frame a response to the rejection. The remarks of the September 3, 2009 Amendment specifically describe how Applicant believes the references submitted to the Patent Office in the IDS demonstrate, contrary to the assertion of the Final Rejection, that hurricane mitigation is possible, and how the claimed subject matter would be viewed as credible by those of skill in the art. The non-response that “the examiner is not at liberty to comment on the previous work of other examiners or the Patent office as a whole” does not even attempt to address the non-patent publications that Applicant submitted. Thus, Applicant is unsure how the Examiner is justifying disregarding the relevance of these references with respect to

Ronald D. Blum et al.  
Application No.: 09/994,860  
February 16, 2010

**PATENT**  
Attorney Docket No. 027001-000310US

whether one of ordinary skill in the art would have believed that the claimed subject matter has credible utility.

Moreover, the work of the “Patent office as a whole” is certainly relevant to the credible utility of an application, and cannot simply be ignored by an Examiner employed by the Office.

### **Conclusion**

For at least the above reasons, Applicant submits that the requirements of MPEP §706.07(b) have not been satisfied. Accordingly, the finality of the final Office Action should be withdrawn. Additionally, Applicant respectfully requests that the Office respond appropriately to the evidence and remarks submitted with the September 3, 2009 RCE.

Applicants believe that no fee is required for submission of this Petition. If a fee is required, however, the Commissioner is authorized to deduct such fee from the undersigned’s Deposit Account No. 20-1430.

Respectfully submitted,

/James E. Golladay/  
James E. Golladay  
Reg. No. 58,182

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, Eighth Floor  
San Francisco, California 94111-3834  
Tel: 202-481-9900  
Fax: 415-576-0300

February 16, 2010

JEG